SCHEMATIC DIAGRAMS
MOD.

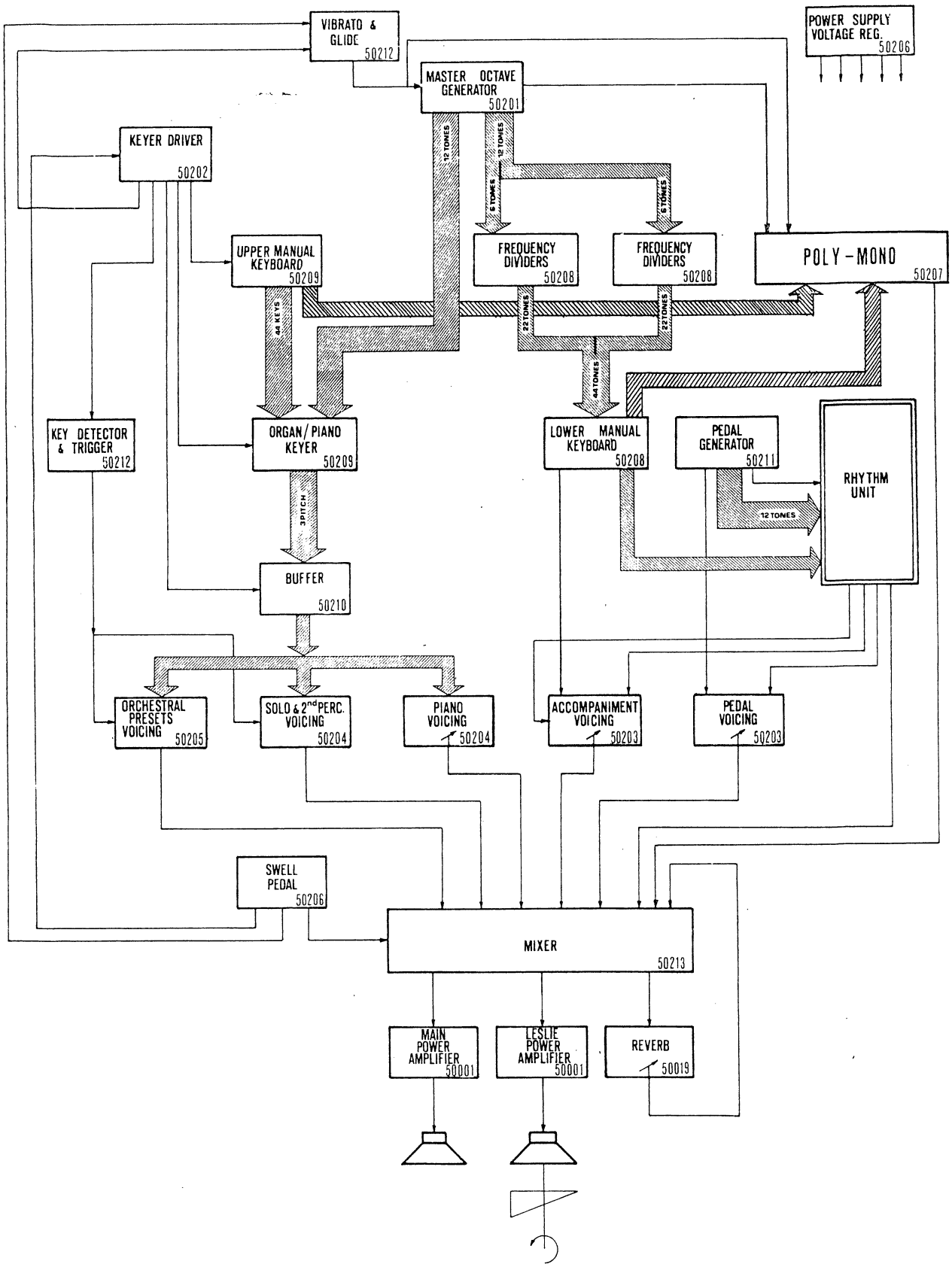
H 3000

ELECTRONIC ORGAN

GEM® A PRODUCT OF general electro music

MONDAINO · FO · ITALY

H3000



ISSUED	DATE	BY
DRAWN	13-5-80	
CKD	13-5-80	
APPRVD		

N°. 50200

REPLACED BY

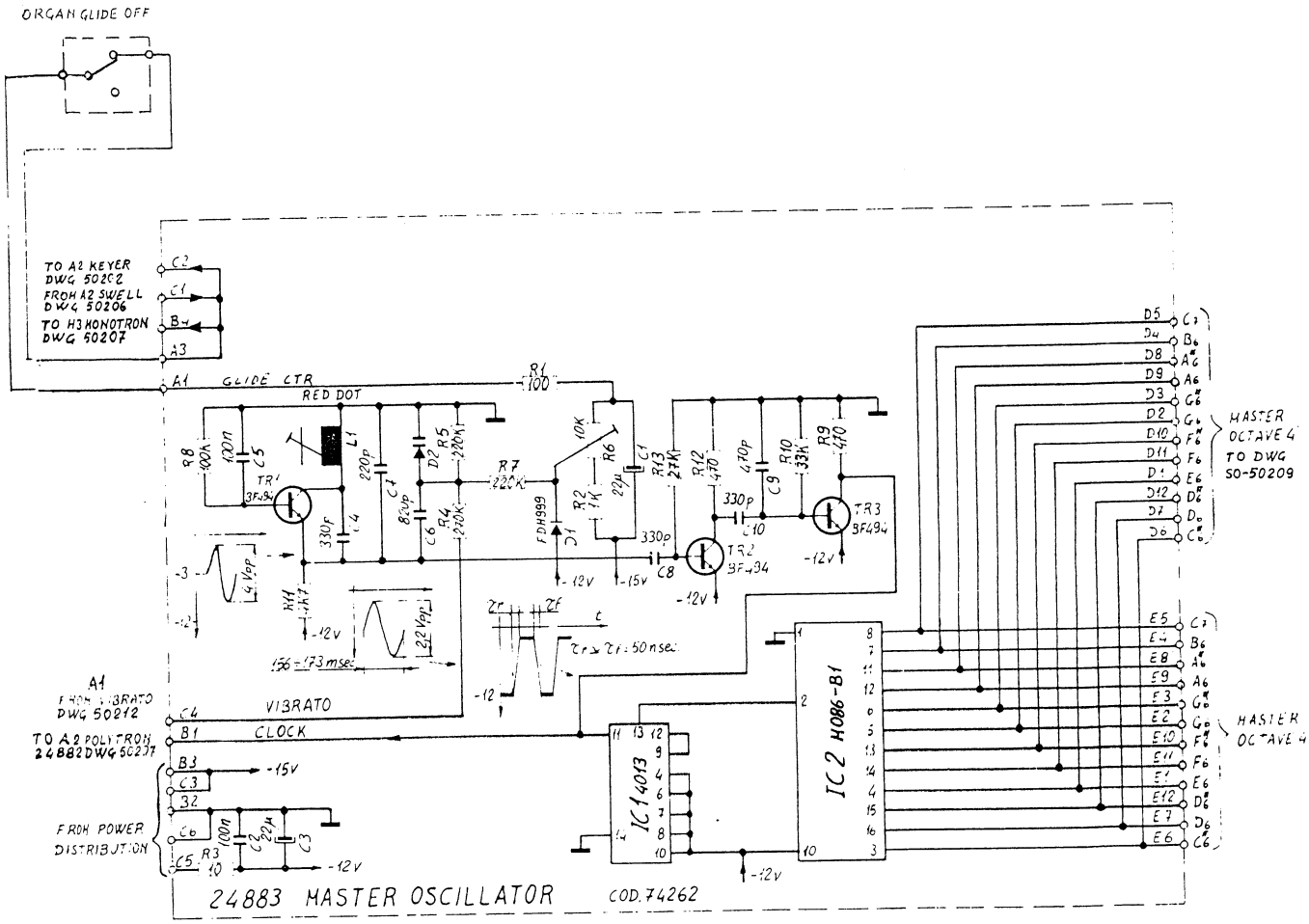
REPLACING

USED ON:

DDR MONDAINO (FO)

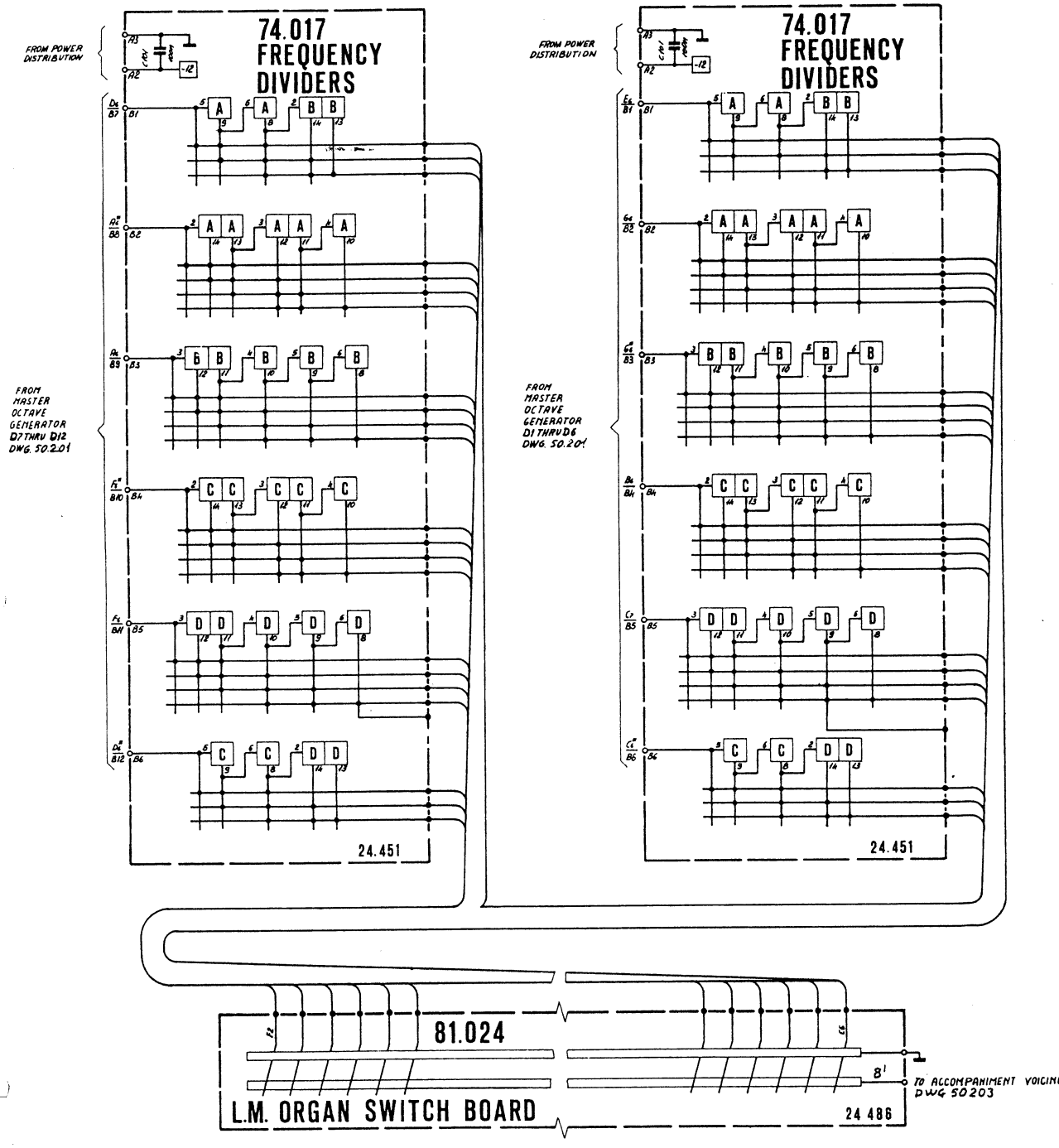
SCHEMATIC DIAGRAM:

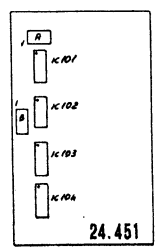
BLOCK DIAGRAM

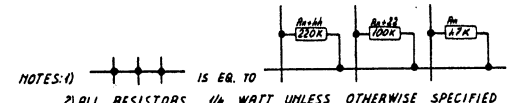


NOTES 1) ALL RESISTORS 1/4 W UNLESS OTHERWISE SPECIFIED
2) ALL REPORTED WAVEFORMS AS WIEVED WITH 10 MHz SCOPE WITH LOW CAPACITANCE PROBE

REV	SUBJECT		DATE	CKD
ISSUED	DATE	BY	USED ON:	DDR MONDAINO (FO)
DRAWN	5-12-80			
CKD				
APPRVD				
N 50201			SCHEMATIC DIAGRAM: MASTER OCTAVE GENERATOR	
REPLACES				
REPLACING				







NOTES: 1) IS EQ. TO

2) ALL RESISTORS 1/4 WATT UNLESS OTHERWISE SPECIFIED
3) A, B, C, D ARE SEVEN STAGES FREQUENCY DIVIDERS Tp HBF 4727

ISSUED	DATE	BY
DRAWN	6.5.80	
CKD	6.5.80	
APPVD		

USED ON:

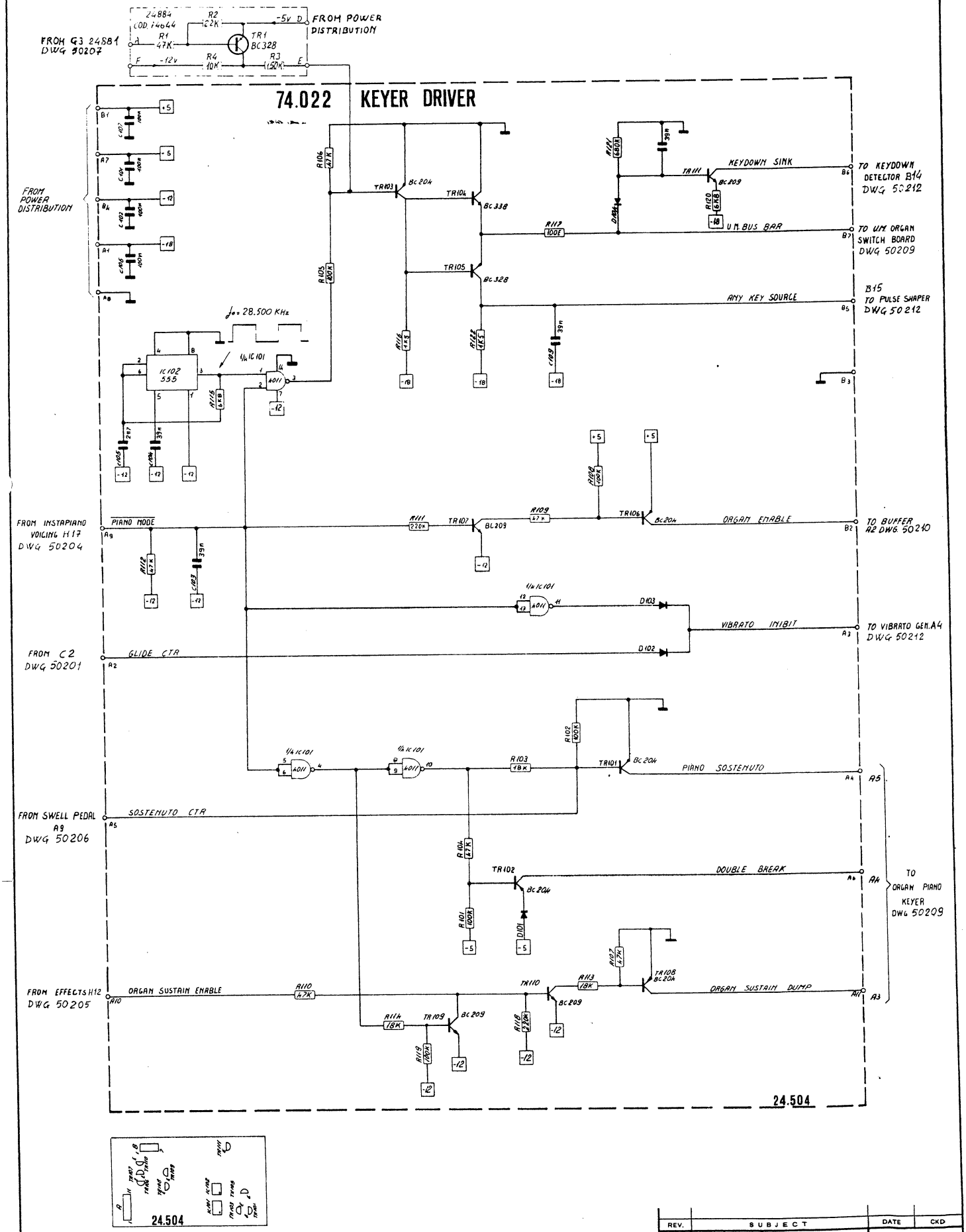
DDR MONDAINO (FO)

N°. 50.208

REPLACED BY

REPLACING

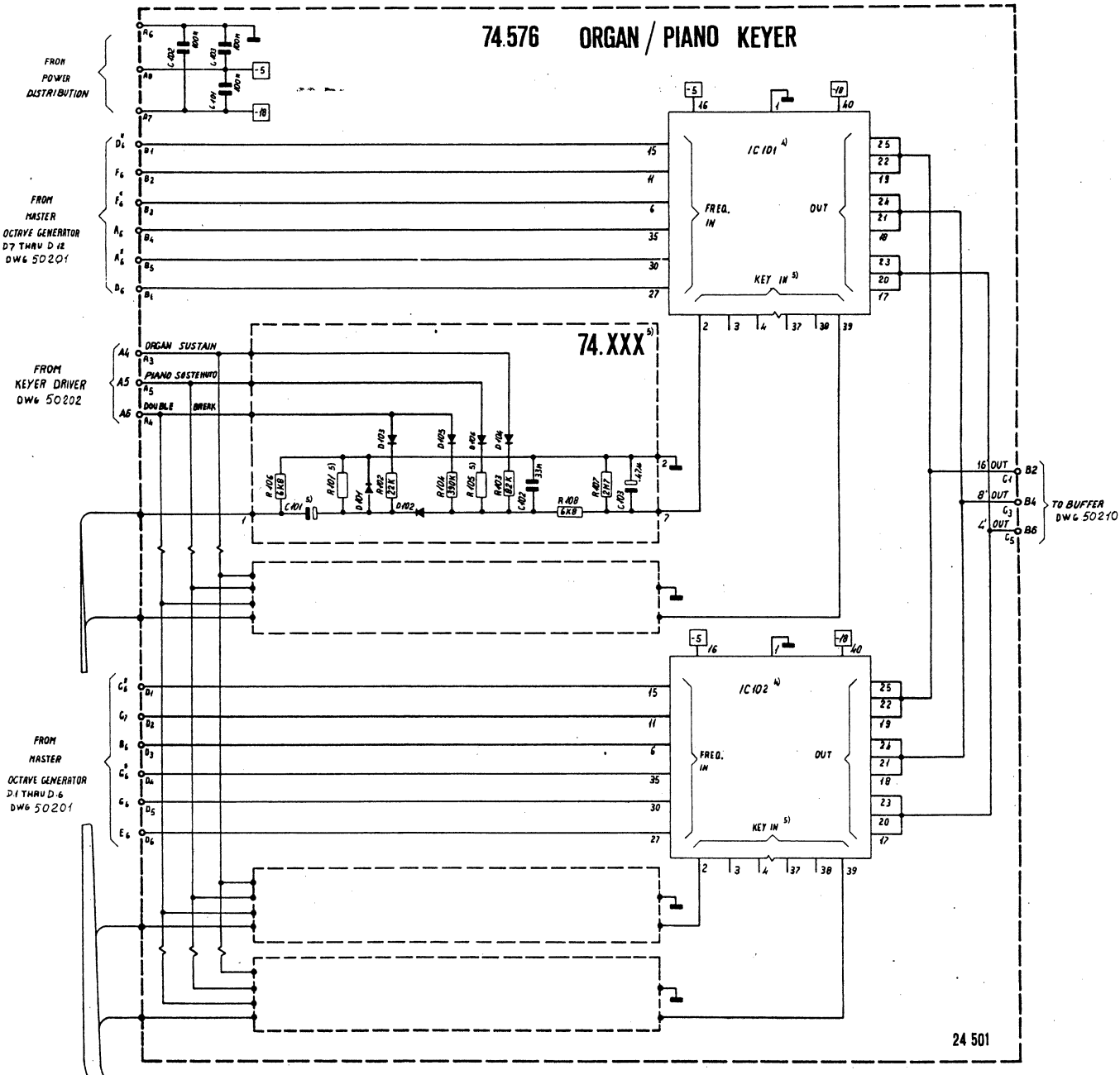
SCHEMATIC DIAGRAM:
LOWER MANUAL GENERATOR



NOTES 1) ALL RESISTORS 1/4 W UNLESS OTHERWISE SPECIFIED
2) ALL DIODES FDH 999 UNLESS OTHERWISE SPECIFIED
3) ALL VOLTAGES MEASURED WITH 20000 OHM/V. VOLTMETER WITH RESPECT TO GND WITHOUT SIGNAL

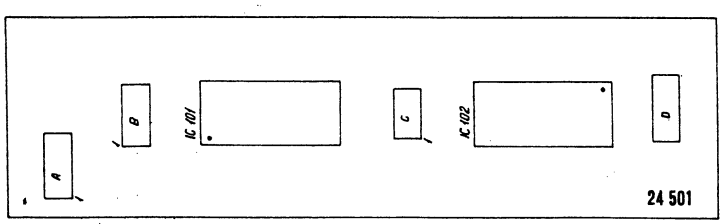
REV.	SUBJECT	DATE	CKD
ISSUED	DATE 6/5/80 BY	USED ON:	DDR MONDAINO (FO)
DRAWN	6/5/80		
CKD	6/5/80		
APPVD			
Nº. 50 202		SCHEMATIC DIAGRAM: KEYER DRIVER	
REPLACED BY			
REPLACING			

74.576 ORGAN / PIANO KEYER



KEYS V.S. IC 101/102 INTERCONNECTIONS

KEY	F2	F2#	G2	G2#	A2	A2#	B2	C3	C3#	D3	D3#	E3	F3	F3#	G3	G3#	A3	A3#	B3	C4	C4#	D4	D4#	E4	F4	F4#	G4	G4#	A4	A4#	B4	C5	C5#	D5	D5#	E5	F5	F5#	G5	G5#	A5	A5#	B5	C6
IC101 PIN	7	2				39	34				26	12		8	3			38	33				28	13		9	4			37	32				29	14		10	5			36	31		
IC102 PIN			34	39			2	7	12			26			33	38			3	8	13			28			32	37			4	9	14			29			31	36			5	10	
C 101	10 n																								6n8																		4n7			
R 101	330K																								680K																		1M			
R 105	330K																								220k																		220k			
PART CODE	74 573																								74 574																		74 575			

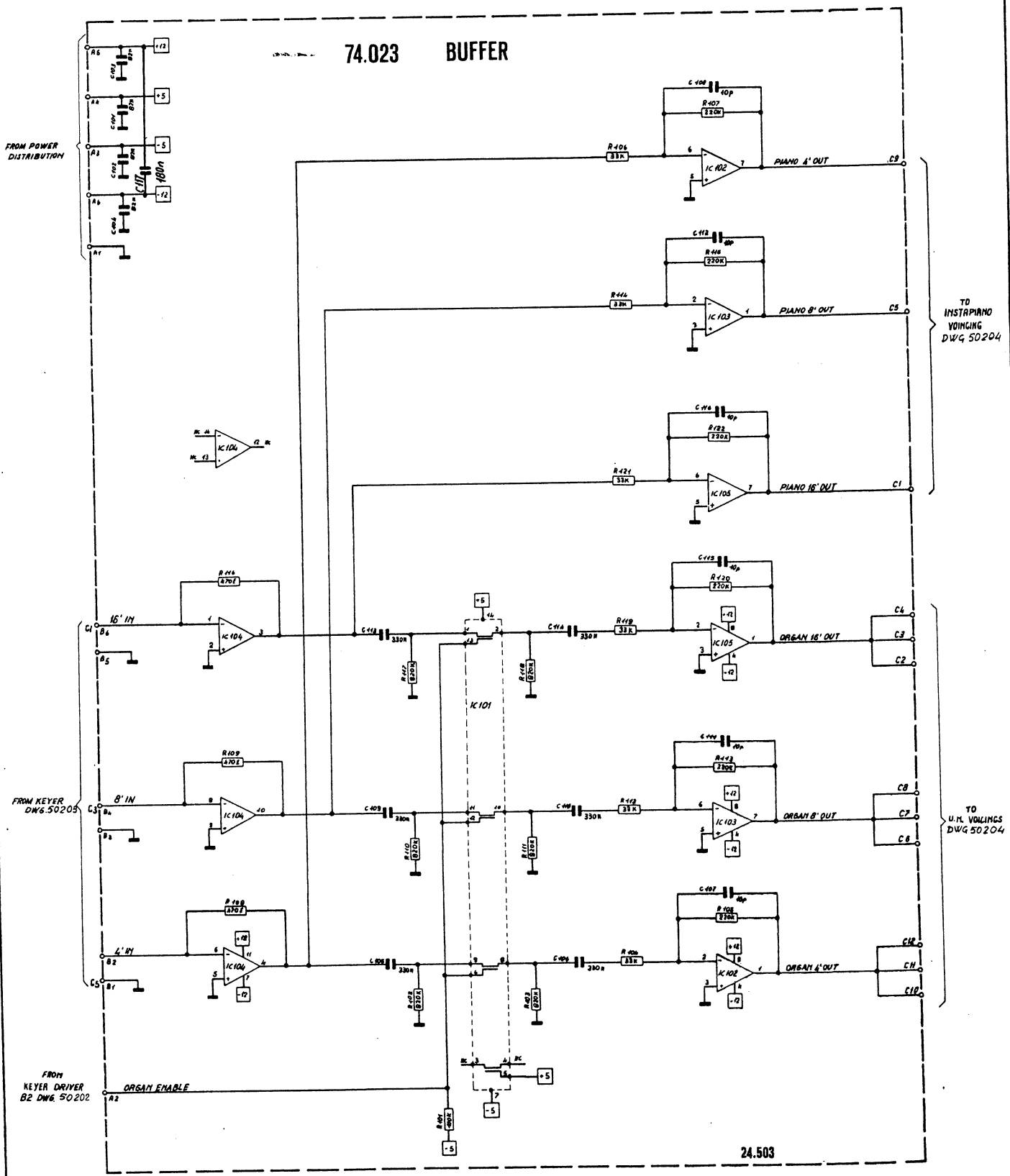


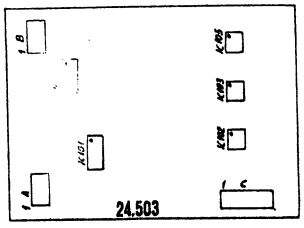
NOTES: 1) ALL RESISTOR 1/4 W UNLESS OTHERWISE SPECIFIED
2) ALL DIODES FDH 999 UNLESS OTHERWISE SPECIFIED
3) ALL VOLTAGES MEASURED WITH 20.000 OHM/V VOLTMETER WITH RESPECT TO GND
4) CUSTOM DEVICE
5) SEE UNDER HEATH TABLE

REV.	SUBJECT		DATE	CKD
ISSUED	DATE	BY	USED ON:	
DRAWN	5-5-80			
CKD	5.5.80			
APPRVD				

DDR MONDAINO (FO)

N°. 50209	SCHEMATIC DIAGRAM: ORGAN / PIANO KEYER
REPLACED BY	
REPLACING	





NOTES: 1) ALL RESISTORS ¼ W UNLESS OTHERWISE SPECIFIED
2) ALL VOLTAGES MEASURED WITH 20000 OHM/V VOLTMETER WITH RESPECT TO GND WITHOUT SIGNAL

REV.	SUBJECT	DATE	CKD
ISSUED	DATE	BY	USED ON:
DRAWN	6·5·80		
CKD	6·5·80		
APPRVD			

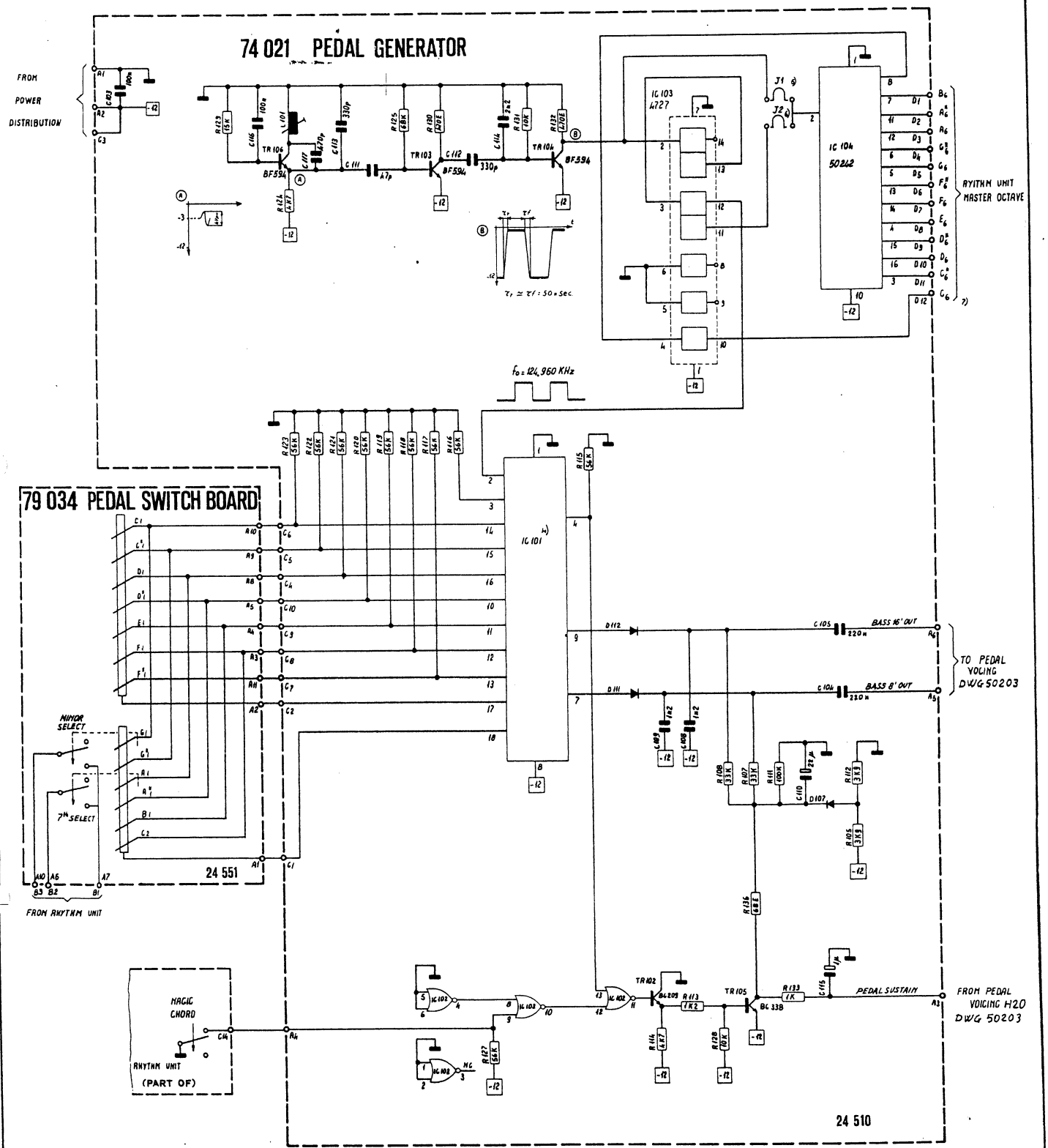
DDR MONDAINO (FO)

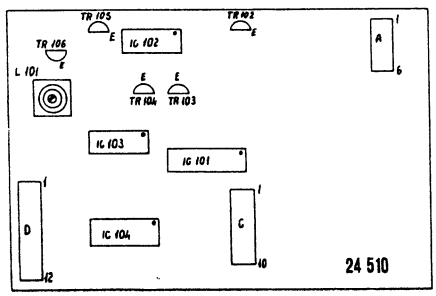
N°. 50210

REPLACED BY

REPLACING

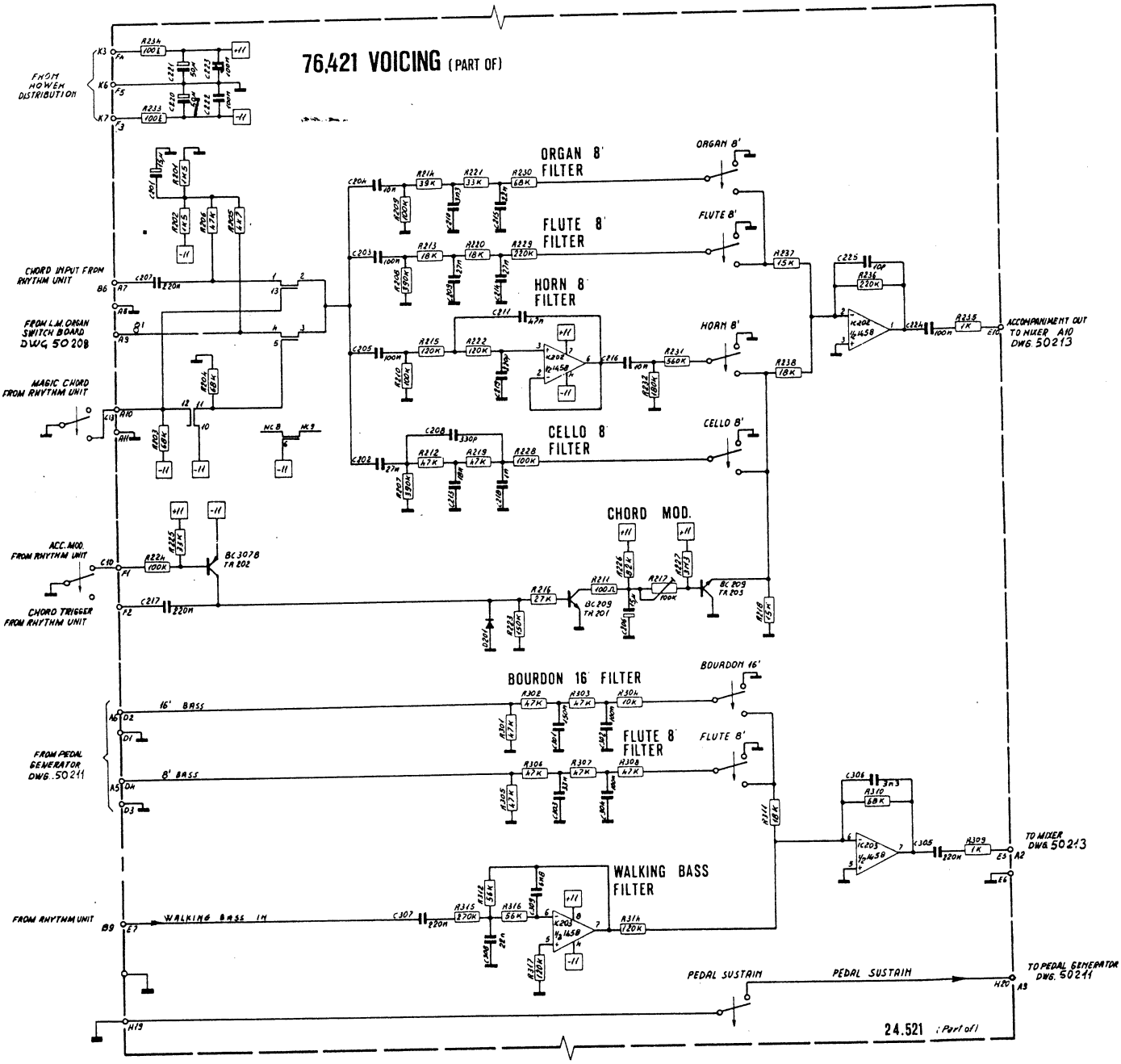
SCHEMATIC DIAGRAM: BUFFER

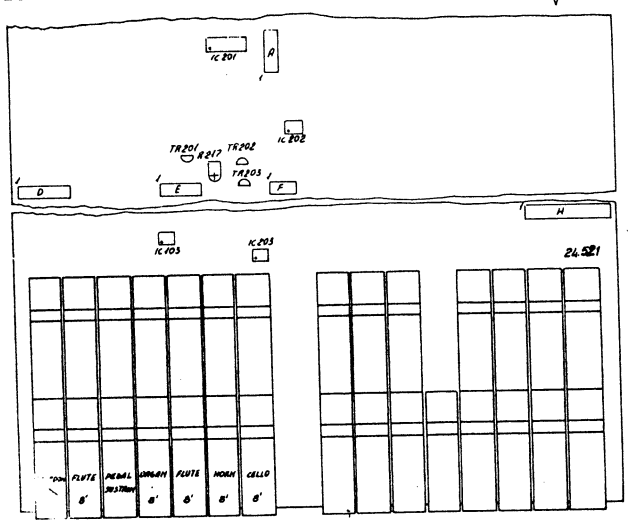




NOTES:
1) ALL RESISTORS 1/4W UNLESS OTHERWISE SPECIFIED
2) ALL DIODES FDH 999 UNLESS OTHERWISE SPECIFIED
3) ALL VOLTAGES MEASURED WITH 20.000 OHM/V METER WITHOUT SIGNAL WITH RESPECT TO GND
4) IC 101 = CUSTOM DEVICE
5) J1 : JUMPER 1 PRESETS PERFORMER II MASTER OCT.
6) J2 : JUMPER 2 PRESETS BIG BAND MASTER OCT.
7) C_x THRU B_x ; SUBSCRIPT REFER TO CORRECT OCTAVE LOCATION:
PERFORMER II x = 6 (J1 SEL.)
BIG BAND x = 2 (J2 SEL.)

REV.	SUBJECT	DATE	CKD
ISSUED	DATE 13-5-80 BY	USED ON:	DDR MONDAINO (FO)
DRAWN	13-5-80		
CKD	13-5-80		
APPRVD			
N°. 50211		SCHEMATIC DIAGRAM: PEDAL GENERATOR	
REPLACED BY			
REPLACING			


76,421 VOICING (PART OF)
FROM HOWEM DISTRIBUTION
ORGAN 8' FILTER
FLUTE 8' FILTER
HORN 8' FILTER
CELLO 8' FILTER
CHORD MOD.
BOURDON 16' FILTER
WALKING BASS FILTER
CHORD INPUT FROM RHYTHM UNIT
FROM L.M. ORGAN SWITCH BOARD DWG. 50208
MAGIC CHORD FROM RHYTHM UNIT
ACC. MOD. FROM RHYTHM UNIT
CHORD TRIGGER FROM RHYTHM UNIT
FROM PEDAL GENERATOR DWG. 50211
FROM RHYTHM UNIT
WALKING BASS IM
ACCOMPANIMENT OUT TO MIXER A10 DWG. 50213
TO MIXER DWG. 50213
TO PEDAL GENERATOR DWG. 50211
PEDAL SUSTAIN
BC 307B TR 202
BC 209 TR 201
BC 209 TR 203
24.521 ; Part of I



NOTES: 1) ALL RESISTORS 1/4 W UNLESS OTHERWISE SPECIFIED
2) ALL VOLTAGES MEASURED WITH 20000 OHM/VOLT METER WITH RESPECT TO GND
3) ALL DIODES FDH 999 UNLESS OTHERWISE SPECIFIED

ISSUED	DATE	BY
DRAWN	26-5-80	
CKD	21-5-8	
APPRVD		

USED ON:

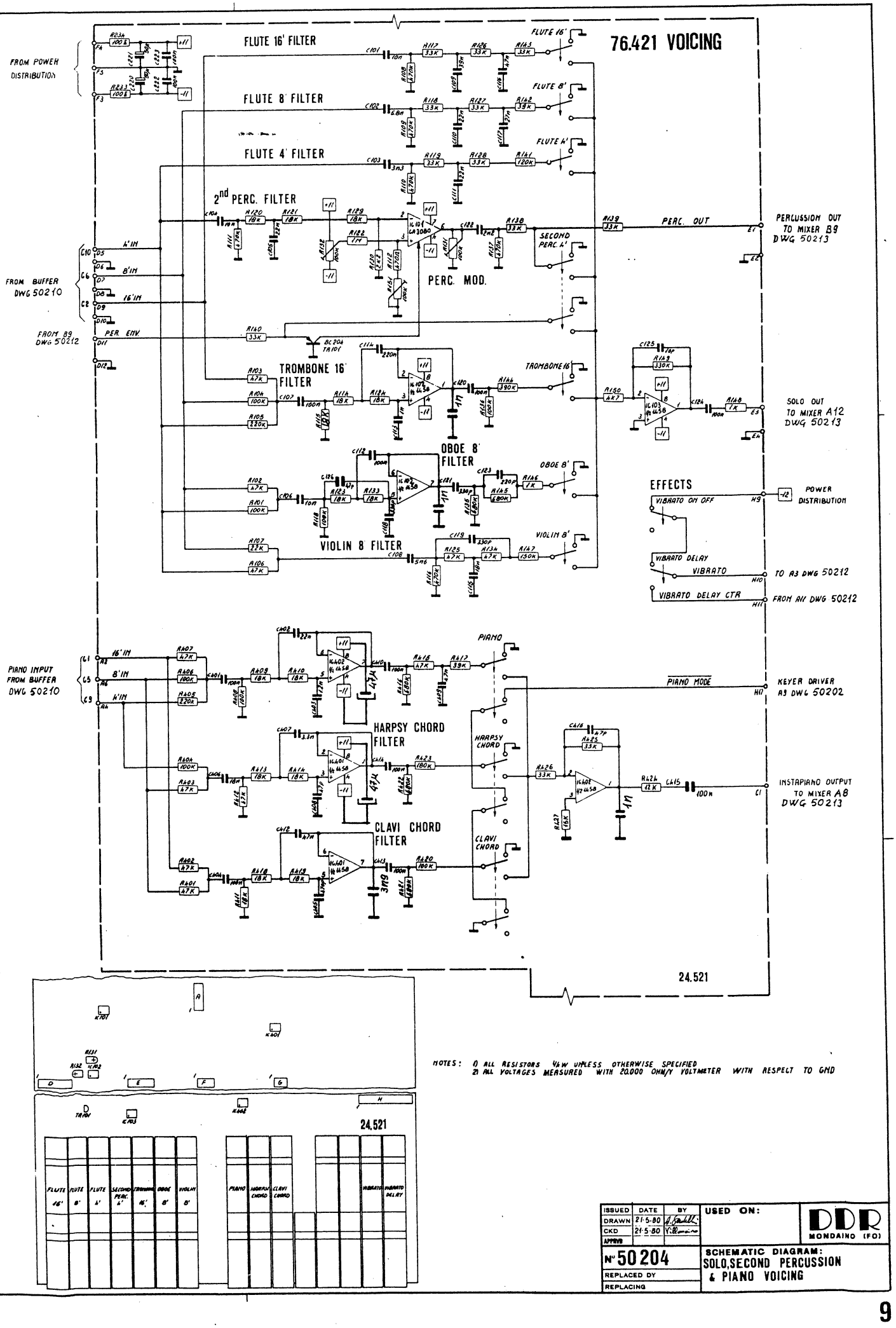
DDR MONDAINO (FO)

Nº. 50 203

REPLACED BY

REPLACING

SCHEMATIC DIAGRAM:
ACCOMPANIMENT & PEDAL VOICING



NOTES: 1) ALL RESISTORS ¼W UNLESS OTHERWISE SPECIFIED
2) ALL VOLTAGES MEASURED WITH 20.000 OHM/V VOLTMETER WITH RESPECT TO GND

ISSUED	DATE	BY
DRAWN	21-5-80	
CKD	21-5-80	
APPVD		

USED ON:

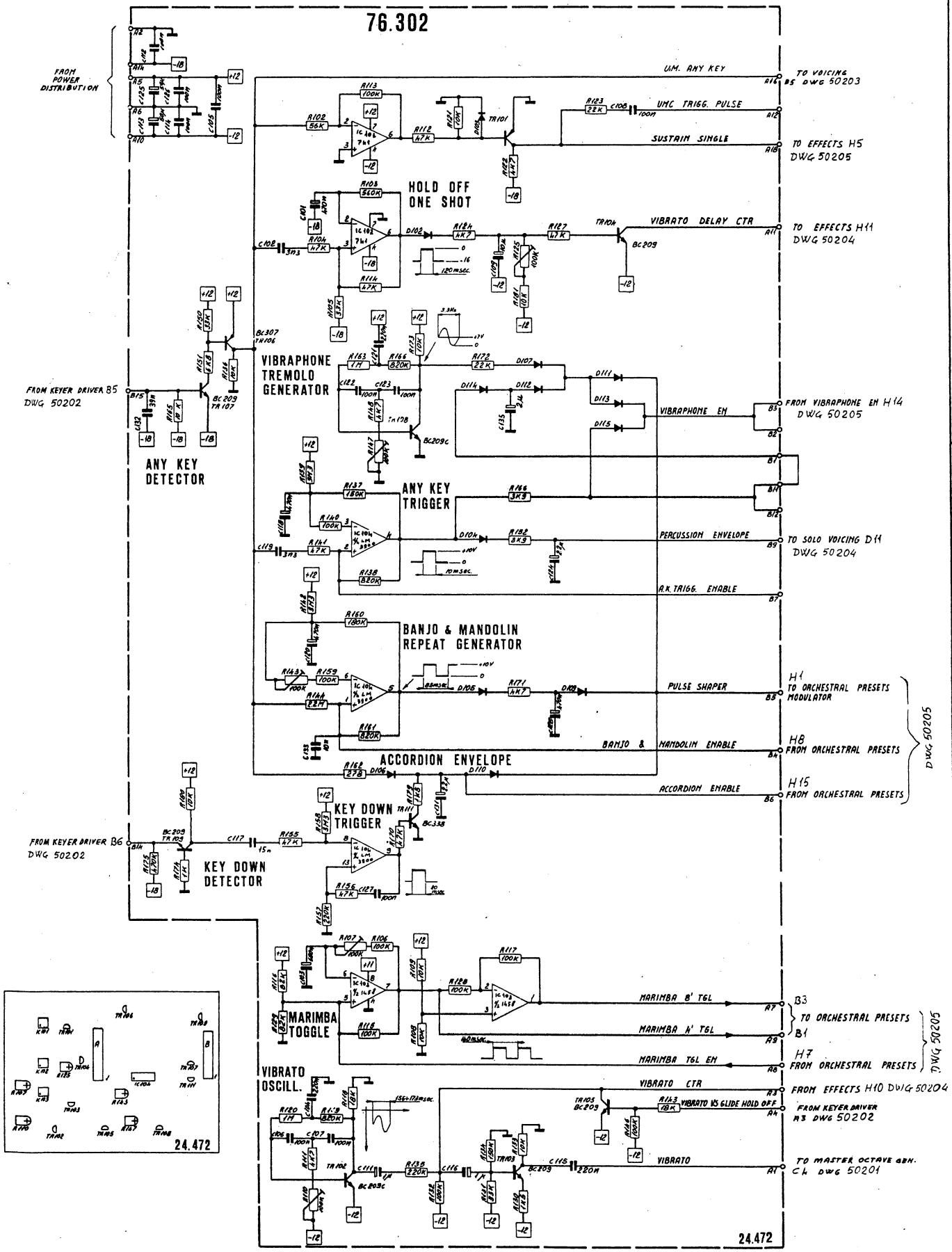
DDR MONDAINO (FO)

N° 50204

REPLACED DY

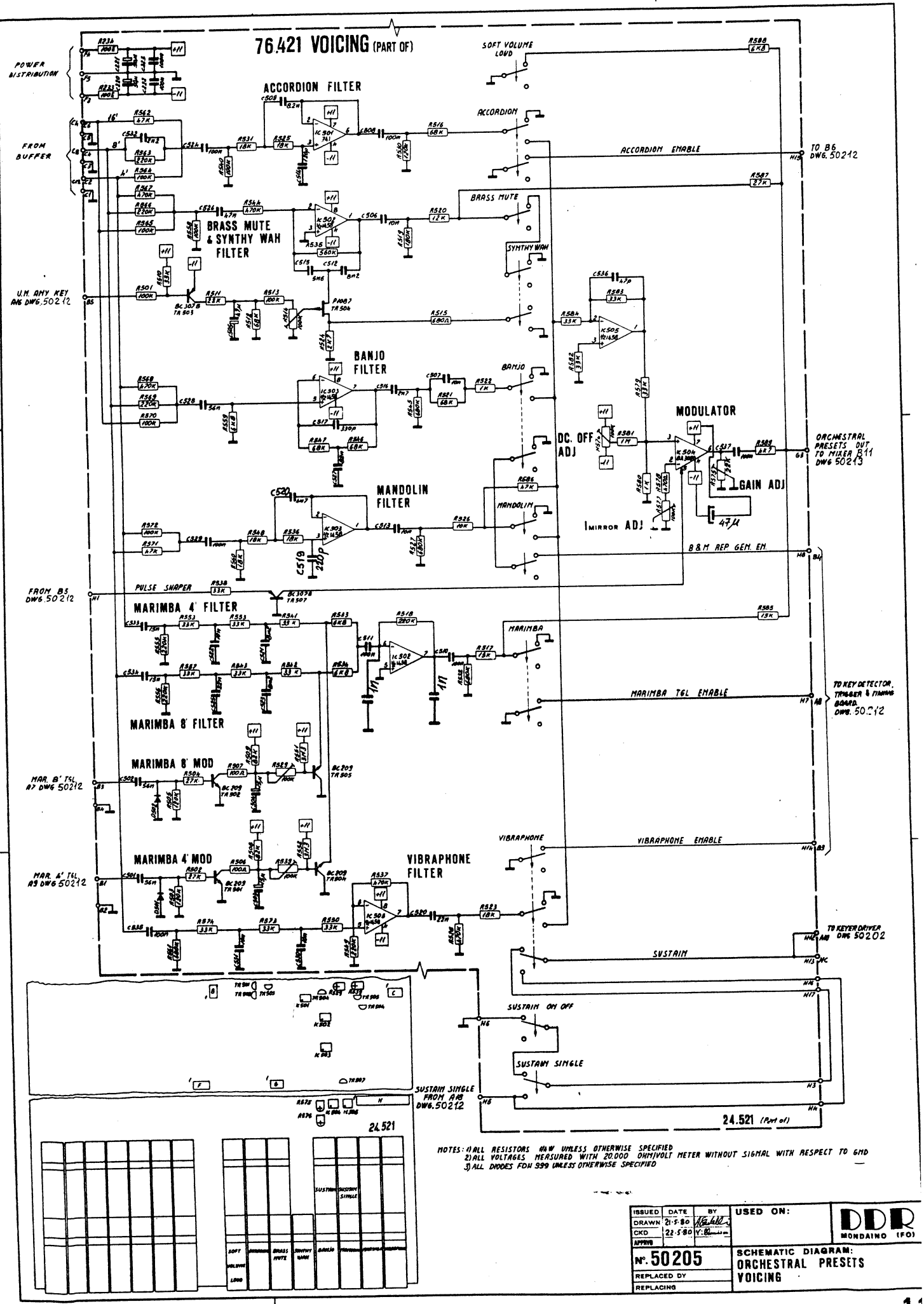
REPLACING

SCHEMATIC DIAGRAM: SOLO, SECOND PERCUSSION & PIANO VOICING



NOTES: 1) ALL VOLTAGES MEASURED WITH 20.000 OHM/VOLTMETER WITH RESPECT 0 Vdc
2) ALL RESISTORS 1/4 WATT UNLESS OTHERWISE SPECIFIED
3) ALL DIODES FDH 999 UNLESS OTHERWISE SPECIFIED

REV.		SUBJECT	DATE	CK'D
ISSUED	DATE	BY	USED ON:	DDR MONDAINO (FO)
DRAWN	20-5-80	A Spinelli		
CK'D	24-5-80	V.M.		
APPRVD				
N°. 50212			SCHEMATIC DIAGRAM: KEY DETECTOR, TRIGGER & TIMING	
REPLACED DY				
REPLACING				



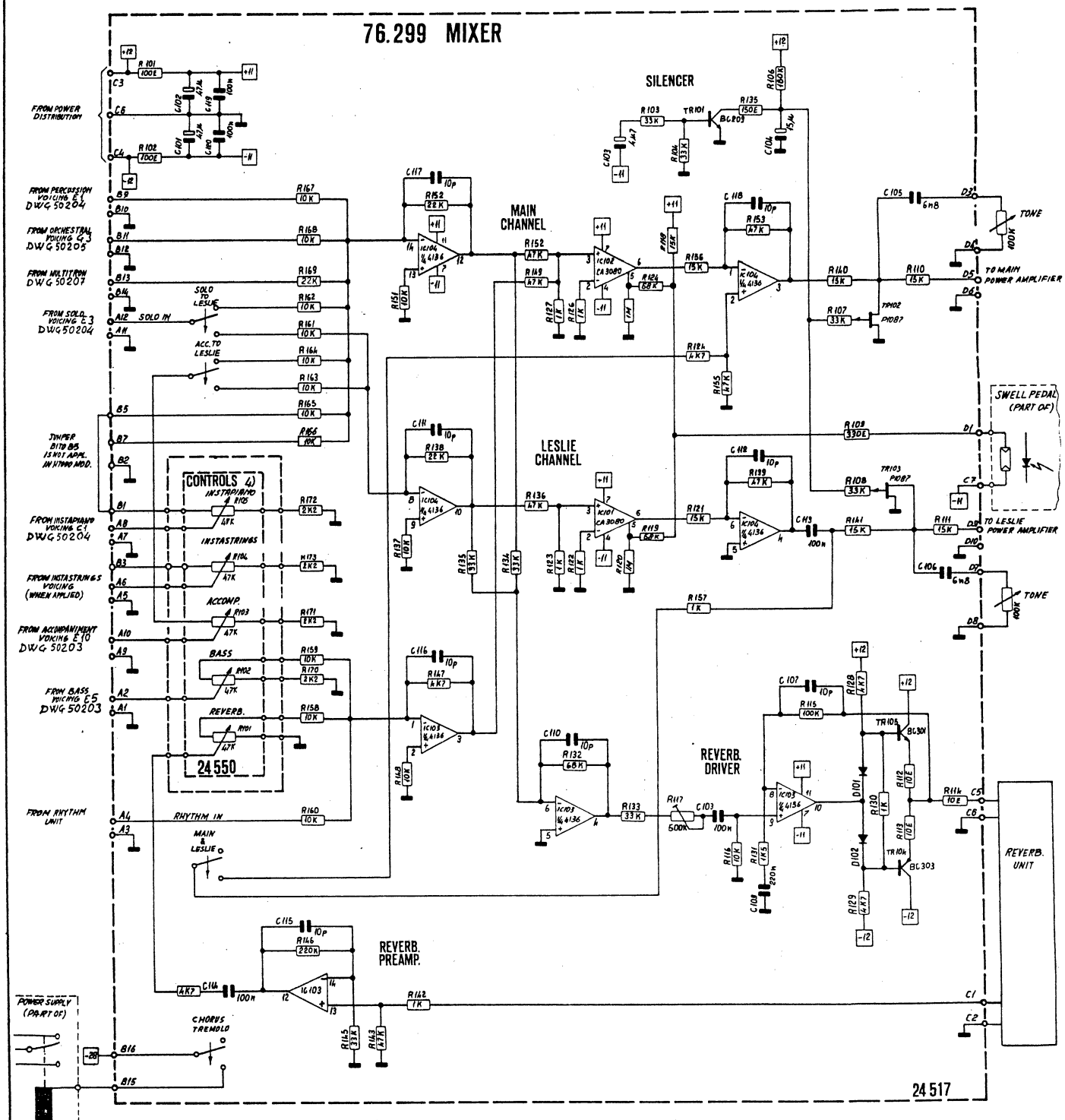
NOTES: 1) ALL RESISTORS ¼W UNLESS OTHERWISE SPECIFIED
2) ALL VOLTAGES MEASURED WITH 20.000 OHM/VOLT METER WITHOUT SIGNAL WITH RESPECT TO GND
3) ALL DIODES FDH 999 UNLESS OTHERWISE SPECIFIED

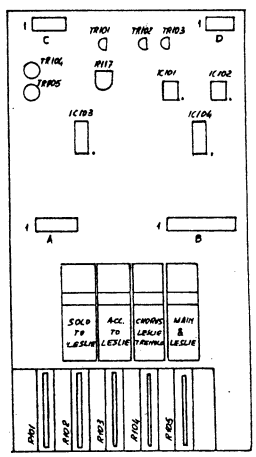
ISSUED	DATE	BY
DRAWN	21·5·80	
CKD	22·5·80	
APPVD		
Nº. 50205		
REPLACED BY		
REPLACING		

USED ON:

DDR MONDAINO (FO)

SCHEMATIC DIAGRAM: ORCHESTRAL PRESETS VOICING



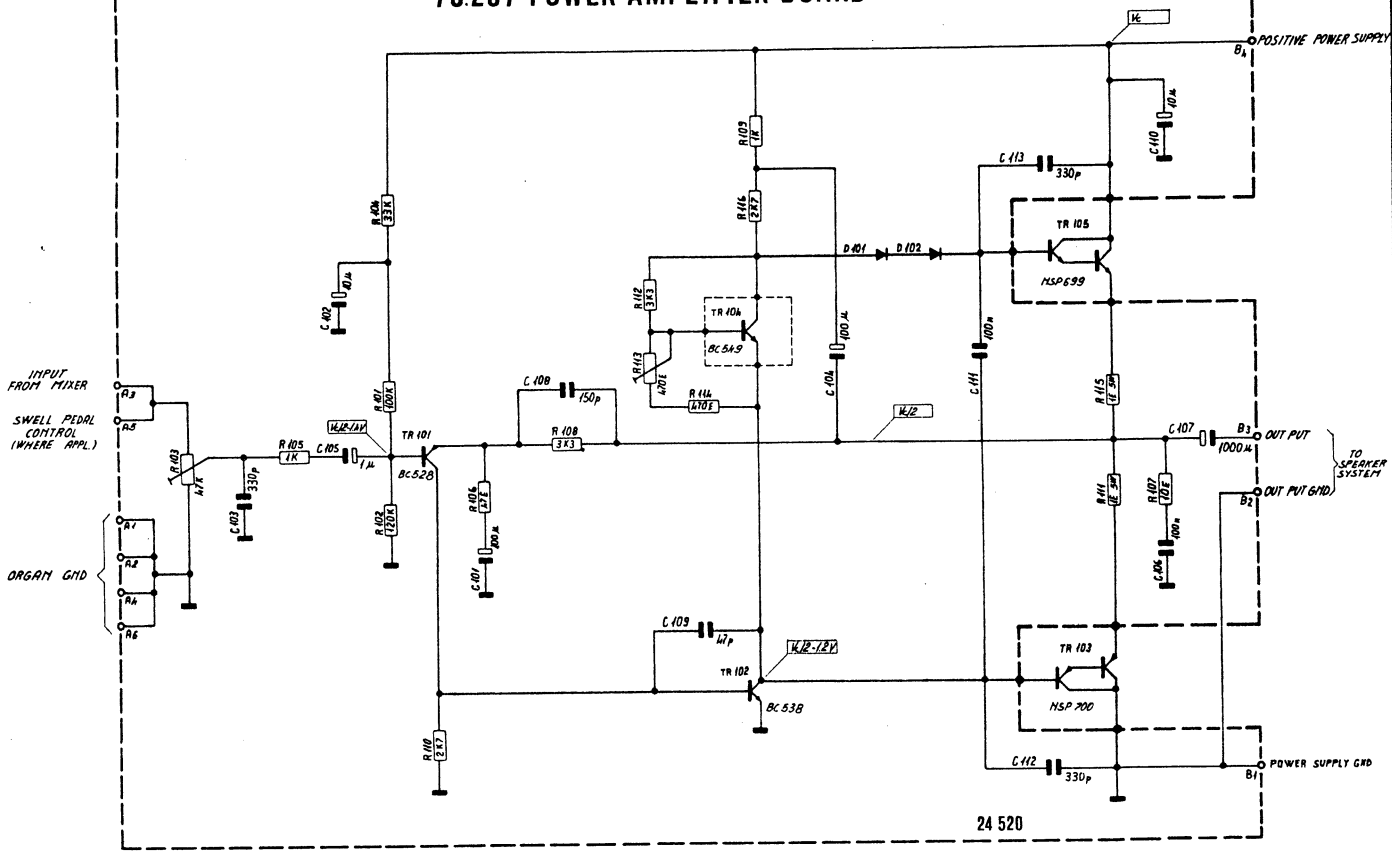


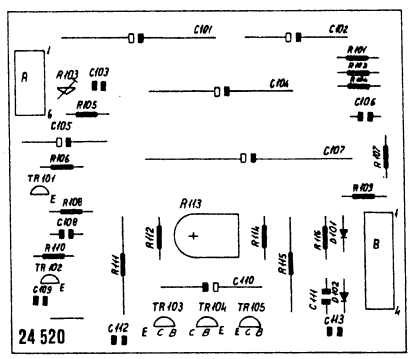
NOTES: 1) ALL RESISTORS 1/4 W UNLESS OTHERWISE SPECIFIED
2) ALL VOLTAGES MEASURED WITH 20.000 OHM/VOLT METER WITH RESPECT TO GND
3) ALL DIODES FDH 999 UNLESS OTHERWISE SPECIFIED
4) CONTROLS CODED: 76.333 WHEN INSTASTRINGS (5 CONTROLS)
76.295 OTHERWISE (4 CONTROLS)

REV.	SUBJECT		DATE
ISSUED	DATE	BY	USED ON:
DRAWN	19-5-80		
CKD	19-5-80		
APPRVD	15/5/80		
N° 50213			SCHEMATIC DIAGRAM: MIXER , REVERB. & CONTROLS
REPLACED DY			
REPLACING			

MONDAINO

76.297 POWER AMPLIFIER BOARD





NOTES: 1) ALL RESISTOR ¼ W UNLESS OTHERWISE SPECIFIED

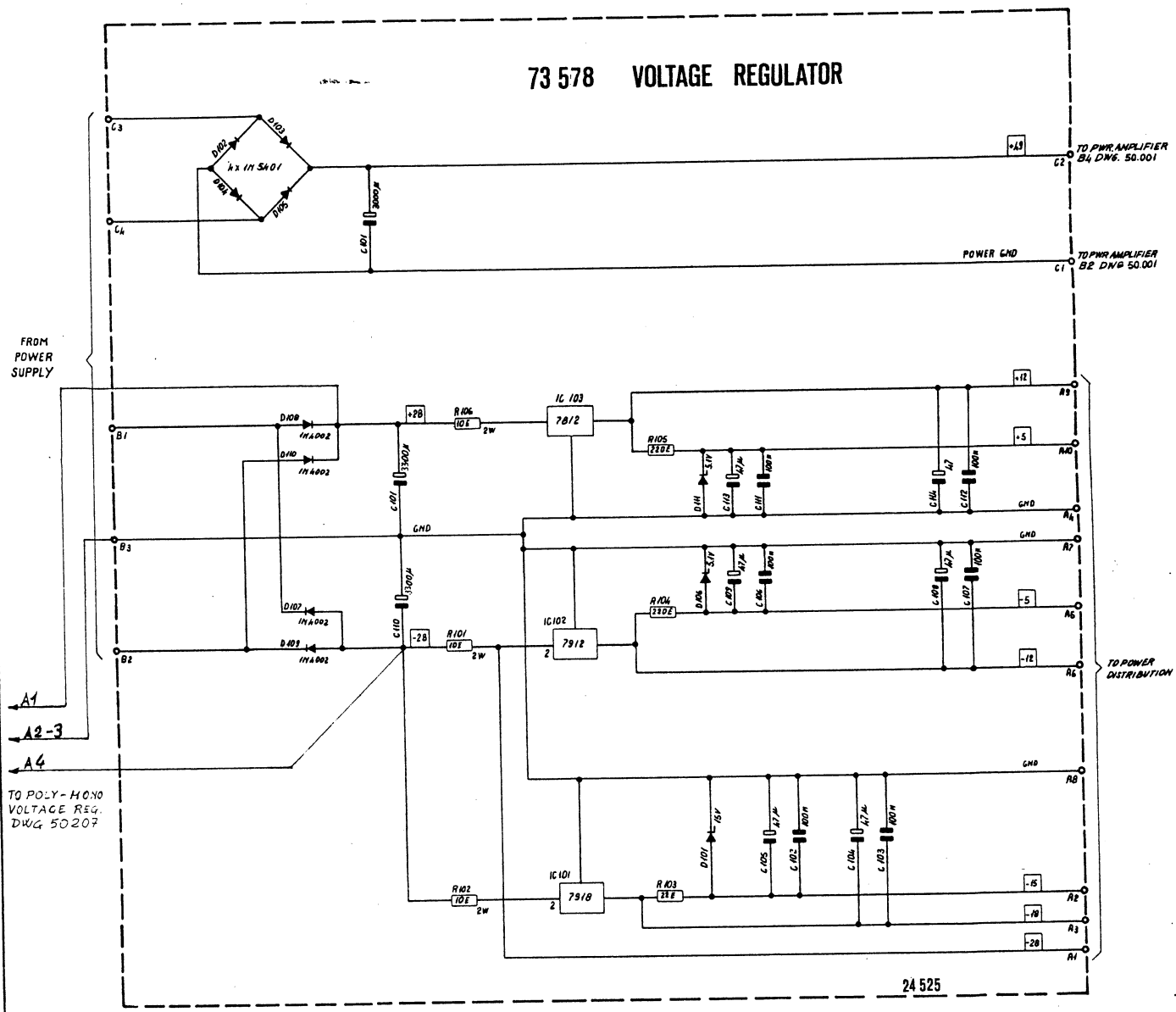
2) ALL VOLTAGES MEASURED WITH 20.000 OHM/V VOLTMETER WITH RESPECT TO GND WITHOUT SIGNAL

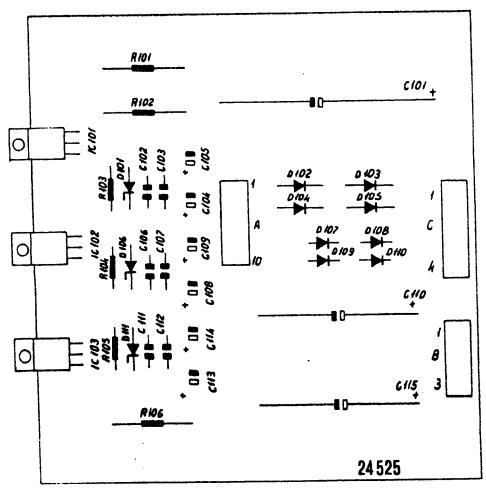
3) ALL DIODES FDH 999 UNLESS OTHERWISE SPECIFIED

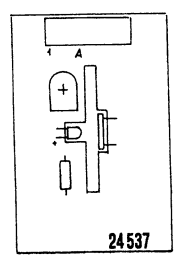
REV.	SUBJECT	DATE	CKD
ISSUED	DATE	BY	USED ON:
DRAWN	5-5-80		
CKD	5-5-80		
APPRVD			
N°. 50.001			SCHEMATIC DIAGRAM:
REPLACED DY			73.028 POWER AMPLIFIER
REPLACING			

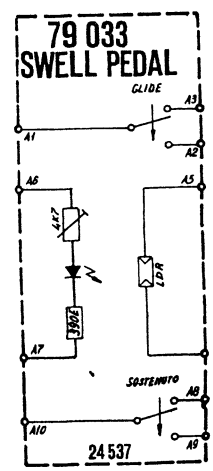
DDR MONDAINO (FO)

73 578 VOLTAGE REGULATOR





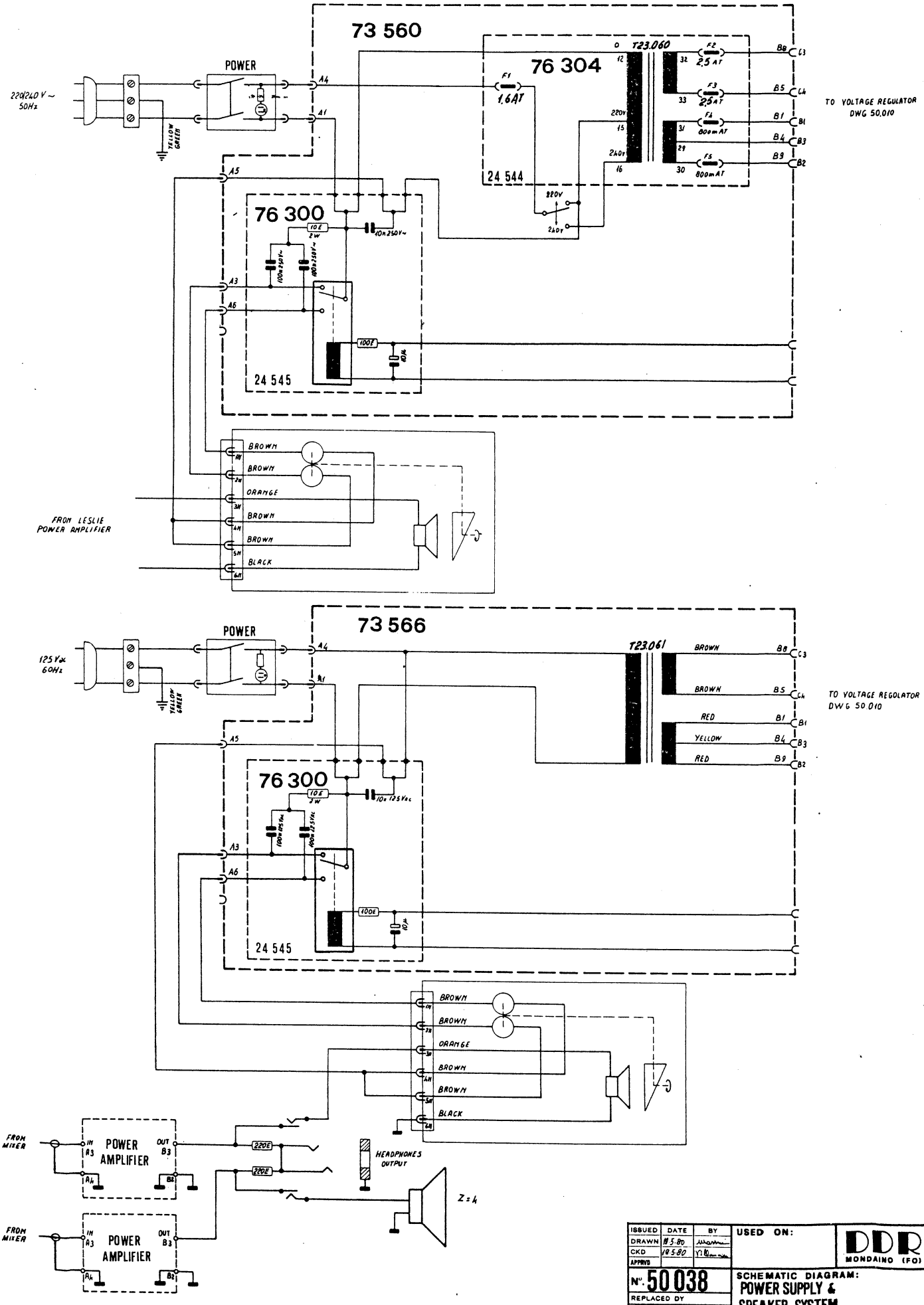




NOTES: 1) ALL RESISTORS ARE ½ W ± 10% UNLESS OTHERWISE SPECIFIED
2) ALL VOLTAGES MEASURED WITH 20.000 OHM/VOLT METER WITHOUT SIGNAL WITH RESPECT TO GND

REV.	SUBJECT		DATE	CKD
ISSUED	DATE	BY	USED ON:	
DRAWN	13-5-80	[illegible]		
CKD	13-5-80	[illegible]		
APPRVD				
N°. 50206			SCHEMATIC DIAGRAM: VOLTAGE REGULATOR & SWELL PEDAL	
REPLACED BY				
REPLACING				

DDR MONDAINO (FO)



ISSUED	DATE	BY
DRAWN	11.5.80	
CKD	19.5.80	
APPRVD		

USED ON:

DDR MONDAINO (FO)

N°. 50038

REPLACED BY

REPLACING

SCHEMATIC DIAGRAM:
POWER SUPPLY & SPEAKER SYSTEM